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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,934	10/15/2001	Hajime Akimoto	520.36114CX1	2676

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EXAMINER
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LIANG, REGINA

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 05/03/2004

23

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/975,934

Applicant(s)

AKIMOTO ET AL.

Examiner

Regina Liang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 16, 28, 20, 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The original specification is inadequately written to provide support for and does not disclose the selecting circuit (AND gate 47 as shown in Fig. 2) is implemented with substantially analog circuitry as is now claimed.

### *Double Patenting*

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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4. Claims 1-15, 17, 19, 21, 23 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 6,329,973. Although the conflicting claims are not identical, they are not patentably distinct from each other because the present claims are the broader version of the patented claims, the only difference between the present claims and the patented claims is that the present claims recite each display pixel includes a selecting circuit while the patented claims recite each display pixel includes an AND logical circuit, however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to realize that the AND logical circuit is a selecting circuit, therefore, the present claims are not patentably distinct from the patented claims.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 4, 7-12, 14, 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuga (US. PAT. NO. 5,546,104).

As to claims 1, 10, 14, 15, Figs. 2 and 3 of Kuga disclose an image display (8) which displays image data on an image display part constructed by a display pixel array, an image data input circuit (10) inputs image data into the image display part by selecting addresses in a row direction and a column direction of the display pixel array so that the display pixel array has two

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neighboring areas having different frame rates or the inputted image data has at least one moving image data and at least one still image data at different frame rates (col. 2, line 31 to col. 4, line 24). Fig. 1 of Kuga also teaches the display pixel array includes row direction address lines (2) and column direction address lines (1), each pixel includes a selecting circuit (3) which is connected to one of the row direction address lines and one of the column direction address lines and useable to select a display pixel.

As to claim 4, Kuga discloses a frame rate selecting circuit which selects a frame rate of the display pixel array on a display pixel unit basis (e.g., see col. 4, lines 25-51).

As to claims 7, Kuga teaches the image data is divided into a moving image field and a stationary image field (see col. 4, lines 25-51 of Kuga for example).

As to claim 8, Fig. 3 of Kuga shows a position of moving image area, wherein the moving image area is changed base on the inputted image signal.

As to claim 9, Kuga teaches the LCD pixel array using a TN mode liquid crystal (Col. 4, lines 52-53).

As to claim 11, Kuga teaches the moving image data is inputted into the display part in a real-time manner from generation of data.

As to claim 12, Fig. 2 of Kuga teaches a storing circuit (13) temporarily stores the still image data until it is inputted into the display part.

7. Claims 1, 5, 6, 10, 14, 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Okumura et al (US. PAT. NO. 5,945,972 hereinafter Okumura).

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As to claims 1, 10, 14, 15, Okumura discloses an image display (Fig. 2) which displays image data on an image display part constructed by a display pixel array, an image data input circuit (113) inputs image data into the image display part by selecting addresses in a row direction and a column direction of the display pixel array so that the display pixel array has two neighboring areas having different frame rates or the inputted image data has at least one moving image data and at least one still image data at different frame rates (12, lines 19-26). Fig. 3 of Okumura also teaches the display pixel array includes row direction address lines and column direction address lines, each pixel includes a selecting circuit (123) which is connected to one of the row direction address lines and one of the column direction address lines and useable to select a display pixel.

As to claims 5, 6, Okumura teaches a display device which having a moving image data and background image data and displaying a halftone or shade of gray by switching between display colors A and B (e.g., see col. 22, lines 7-12).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuga in view of Ishii et al (US. PT. NO. 4,751,502 hereinafter Ishii).

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Kuga does not disclose a code data storing circuit for storing gradation data in a predetermined code data format. However, Ishii teaches a LCD display device having a code data storing circuit (Table) for storing gradation data in a predetermined code data format. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Kuga to have a gradation data storing circuit as taught by Ishii so as to provide a gray scale in Kuga's LCD display device.

10. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuga in view Reilly (US. PAT. NO. 6,580,422).

Fig. 2 of Kuga the display device having an image data generating circuit (PC side) and an image data input circuit (display apparatus side), and a transmitting circuit (connecting lines) for transmitting image data generated by PC side to the display apparatus side. Kuga does not disclose the display device having a wireless signal transmitting circuit for wirelessly transmitting image data generated by the image data generating circuit to the image data input circuit. However, Reilly teaches a computing device for wirelessly transmitting image data generated by the computer device to a remote display device. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the display device of Kuga to have a wireless transmitting circuit as taught by Reilly so as to transfer display information to a remote display device by a wireless data link and to generate the video image on the remote display device.

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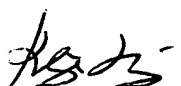
11. Claims 16-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuga in view McKnight (US. PAT. NO. 5,959,598).

Kuga does not explicitly disclose the selecting circuit is implemented with substantially analog circuitry or digital circuitry. However, McKnight teaches a pixel circuit having a transistor selecting circuit which can be used either as an analog pixel or a digital pixel (col. 2, lines 60-63). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Kuga's selecting circuit in each pixel to be implemented with analog circuitry or digital circuitry as taught by McKnight so as to provide a display device capable of providing an analog signal or binary signal at each pixel.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (703) 305-4719. The examiner can normally be reached on Monday-Friday from 9AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (703) 305-4709. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

  
REGINA LIANG  
PRIMARY EXAMINER  
ART UNIT 2674

RL  
4/29/04